

IN THE CLAIMS:

1. **(Amended)** A method for determining a subject's susceptibility to developing an inflammatory disease or condition, comprising the steps of detecting an IL-1B allele (+6912) or an allele in linkage disequilibrium with an IL-1B allele (+6912) in a nucleic acid from the subject, wherein detection of IL-1B allele 2 (+6912) or an allele in linkage disequilibrium with IL-1B allele 2 (+6912) indicates that the patient has an increased susceptibility for developing the disease or condition.

2. **(Canceled)**.

3. **(Amended)** A method of claim 2, wherein said inflammatory disease or condition is selected from the group consisting of: coronary artery disease, osteoporosis, nephropathy in diabetes mellitus, alopecia areata, Graves disease, systemic lupus erythematosus, lichen sclerosis, ulcerative colitis, diabetic retinopathy, periodontal disease, juvenile chronic arthritis (e.g. chronic iridocyclitis), psoriasis, insulin dependent diabetes in DR 3/4 patients, asthma, chronic inflammatory liver disease, chronic inflammatory lung disease, lung fibrosis, liver fibrosis, rheumatoid arthritis and ulcerative colitis.

4. A method of claim 1, wherein the IL-1B allele (+6912) is detected by hybridizing the nucleic acid sample with at least one detection oligonucleotide that contains 6 consecutive nucleotides selected from the group consisting of: 5' ATTAAC 3'; 5' TTAACA 3'; 5' TAACAC 3'; 5' AACACT 3'; 5' ACACTG 3'; 5' CACTGA 3'; 5' ATTAAG 3'; 5' TTAAGA 3'; 5' TAAGAC 3'; 5' AAGACT 3'; 5' AGACTG 3'; and 5' GACTGA 3'.

5. A method of claim 1, wherein the IL-1B allele (+6912) is detected by contacting the sample DNA with a HinfI restriction enzyme and analyzing the restriction fragments, wherein a band pattern of 89, 76 and 61 base pair fragments identifies the IL-1B allele 2 and 76, 61, 54 and 35 base pair bands identify the IL-1B allele 1.

6. A kit for determining a subject's susceptibility to developing a disease or condition, said kit comprising a first primer oligonucleotide that hybridizes 5' or 3' to an IL-1B +6912 allele or a marker that is in linkage disequilibrium with an IL-1B +6912 allele.

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7. A kit of claim 6, which additionally comprises a second primer oligonucleotide that hybridizes 3' to an IL-1B +6912 marker when the first primer hybridizes 5' and hybridizes 5' to an IL-1B +6912 marker when the first primer hybridizes 3'.

8. A kit of claim 6, wherein said first primer and said second primer hybridize to a region of an IL-1B gene that includes position +6912, wherein said region is in the range of between about 50 and 1000 base pairs.

9. A kit of claim 6 or 7, wherein said primers are selected from the group consisting of:

- a) 5'GCTCCCACATTCTGATGAGCAAC3' (SEQ. ID. NO. 3);
- b) 5'TGCAGCACTCAGCAATGAGGAG3' (SEQ. ID. NO. 4);
- c) 5'CCCATTTAAATCTGAGCTTATATATTTTGAGT3' (SEQ. ID. NO. 5);
- d) 5'TCAATTTGGACTGGTGTGCTC3' (SEQ. ID. NO. 6); and

e) 5'TCAGAACCATTGAACAGTATGATATTG3' (SEQ. ID. NO. 7)

10. A kit of claim 9, further comprising a detection means, wherein said detection means is an appropriate amount of HinfI restriction enzyme to digest the sample and a means to analyse the digested sample, wherein a band pattern of 89, 76 and 61 base pairs identifies the IL-1B allele 2 and a band pattern of 76, 61, 54 and 35 base pairs identifies the IL-1B allele 1.

11. A kit of claim 9, further comprising a detection means, wherein said detection means is a detection oligonucleotide that contains 6 consecutive nucleotides selected from the group consisting of: 5' ATTAAC 3'; 5' TTAACA 3'; 5' TAACAC 3'; 5' AACACT 3'; 5' ACACTG 3'; 5' CACTGA 3'; 5' ATTAAG 3'; 5' TTAAGA 3'; 5' TAAGAC 3'; 5' AAGACT 3'; 5' AGACTG 3'; and 5' GACTGA 3'.

12. A kit of claim 9, further comprising a DNA sampling means and a DNA sampling reagent.

13. A kit of claim 6, which further comprises a control.

14. A kit of claim 11, wherein said detection oligonucleotide includes a label.

34. An isolated nucleic acid comprising the nucleotide sequence as shown in SEQ ID. No. 2.

35. **(Twice Amended)** An isolated nucleic acid which is comprised of between about 100 and about 7000 nucleotides of SEQ ID. No.2 and contains a cytosine at a position corresponding to position 8845 of SEQ ID No.2.

36. An isolated nucleic acid of claim 35, which is comprised of between about 5000 and about 7000 nucleotides.

37. **(Canceled).**

38. **(Canceled).**

39. **(Canceled).**

42. **(Canceled).**

43. A kit of claim 6, wherein said first primer is the nucleic acid of SEQ. ID. No: 5.

44. A kit of claim 43, further comprising an appropriate amount of HinfI restriction enzyme.

REMARKS:

The claims as pending upon entry of this amendment are listed above.

To expedite prosecution, claims 37-39 and 42 have been canceled without prejudice.